

REMARKS

Claims 1-4, 6-54 and 56-67 are pending in this patent application. Reconsideration of the rejection in view of the remarks below is requested.

Rejection under 35 U.S.C. §102(e) in view of Ginter

The Office Action rejected claims 1-15, 64 and 65 under 35 U.S.C. §102(e) as allegedly being unpatentable over U.S. Patent No. 5,892,900 to Ginter et al. ("Ginter"). Applicant respectfully traverses the rejection because the cited portions of Ginter fail to disclose each and all the features recited in combination in the rejected claims.

Summary

Cryptographic representation of a business organization has typically been defined statically, for a given time. But, such representation has limits especially in business organizations facing structural or dynamic changes. Thus, Applicant's invention of claim 1 relates to control and maintenance of an operational organizational structure to solve, for example, management of dynamic business organizations which often can face significant structural changes. To facilitate this control and maintenance, Applicant's method of claim 1 associates entities of one or more business organizations with cryptographic capabilities and organizes the entities within the organizational structure of the one or more business organizations as roles. The claimed method further maintains (i.e., changes, updates, etc.) the roles within the organizational structure.

In contrast, Ginter is generally directed to completely different subject matter, namely systems and methods for electronic commerce including secure transaction management and electronic rights protection. Ginter discloses a distributed virtual distribution computer environment (VDE) that enforces a secure chain of handling and control to control and/or meter or otherwise monitor use of electronically stored or disseminated information. In short, Ginter is directed to a specific computer system for secure handling of information.

"Organizing entities within the organizational structure as roles through associating the electronic representations of entities with electronic representations of roles"

So, for example, Applicant submits that the cited portions of Ginter fail to disclose organizing entities within an organizational structure of one or more business organizations as roles through associating the electronic representations of entities with electronic representations of roles, entities which have associated cryptographic capabilities, as recited in claim 1. The references to "role" in the cited portions of Ginter are simply not applicable to the claim language.

The Office Action refers to the disclosure in Ginter that "[t]he originating user may wish to permit distribution only to specific users, defined groups of users, defined geographic areas, users authorized to act in specific organizational roles, or a combination of any or all such attributes." However, this says nothing about organizing entities, let alone associating electronic representations of entities with electronic representations of roles. This cited portion of Ginter merely indicates that users in the computer system of Ginter may have various roles and that distribution of a document may be limited to only that user. Moreover, there is no disclosure that these users have associated cryptographic capabilities.

Page 5 of the Office Action asserts that "...any modules or subparts that server [sic] to enable the technological realization of a functional organization may be construed as an assignment of 'roles' to these modules insofar as their functions, and therefore contribution to the organizational entity, dictate." However, the Office Action provides no support for this contention in Ginter. Moreover, Applicant submits that the contention is incorrect and not supported by the cited portions of Ginter. To the extent Ginter discloses an organizational structure as claimed, the cited portions of Ginter simply fail to disclose organizing entities with that organizational structure as roles. The mere existence of "modules or subparts" has no logical connection to a method of organizing entities as roles (just as, for example, a disclosure of a person has no logical connection to organizing a person in an organization as a role of a president). Appropriate "modules or subparts" may be organized into roles, but such a method isn't disclosed in the cited portions of Ginter (let alone do to so through associating the electronic representations of entities with electronic representations of roles). Further, there is no disclosure that the "modules or subparts" of Ginter have associated cryptographic capabilities.

The Office Action further asserts that “[a]n organization is simply an aggregation of interacting persons, or components to impel a specified directive or purpose. The interactions of these components with respect to that organization in forwarding that purpose has been construed by the Examiner to be their ‘role’.” To the extent that may be true (or not), it simply doesn’t answer how the cited portions of Ginter disclose organizing entities as roles, let alone do so through associating the electronic representations of entities with electronic representations of roles, wherein the entities have associated cryptographic capabilities.

The Office Action further refers to paragraphs 1500-1502 of Ginter, which discuss techniques for an attacker of Ginter’s system to determine sensitive data. Respectfully, this simply discloses nothing about entities of an organizational structure, organizing entities as roles, or associating the electronic representations of entities with electronic representations of roles. It merely discloses that sensitive data, such as cryptographic keys, may be discovered by, for example, comparing various instances of materials, comparing disk and memory images of materials, or analyzing the timing and/or order of modification to an image of materials. Moreover, Applicant respectfully submits that it doesn’t disclose that the entities have associated cryptographic capabilities.

The Office Action also refers to paragraphs 1865 and 1866 of Ginter. However, that disclosure merely discloses that participants in Ginter’s VDE may have particular roles. However, that does not meet the claim recitation of organizing entities as roles. Rather, the participants in Ginter merely have their particular roles, but there is no disclosure that their organized as roles as claimed.

Thus, the cited portions of Ginter simply do not provide any disclosure or teaching of (1) organizing entities within an organizational structure of one or more business organizations, (2) that those entities have associated cryptographic capabilities, and (3) organizing the entities as roles through associating corresponding electronic representations as recited in claim 1.

"Upon any addition, deletion or modification of an entity, a cryptographic capability, or any of their associations, maintaining roles within the organizational structure by adding, deleting or modifying electronic representations of the entities, cryptographic capabilities, roles, or any of their associations"

Additionally, the cited portions of Ginter fail to disclose upon any addition, deletion or modification of an entity, a cryptographic capability, or any of their associations, maintaining roles within the organizational structure by adding, deleting or modifying electronic representations of the entities, cryptographic capabilities, roles, or any of their associations as recited in claim 1.

The cited portions of Ginter merely disclose being able to "add, delete, and/or otherwise modify the specification of load modules and methods, as well as add, delete or otherwise modify related information." Similarly, the cited portions of Ginter merely disclose "[h]andlers in a pathway of handling of content control information ... can establish, modify, and/or contribute to, permission, auditing, payment, and reporting control information related to controlling, analyzing, paying for, and/or reporting usage of, electronic content and/or appliances (for example, as related to usage of VDE controlled property content)."

However, none of the cited portions of Ginter discuss maintaining roles within an organizational structure of one or more business organizations by adding, deleting or modifying electronic representations of the entities (within that organizational structure), cryptographic capabilities, roles, or any of their associations, let alone to do so upon any addition, deletion or modification of an entity, a cryptographic capability, or any of their associations. There is simply no reference in those cited portions of Ginter to entities of an organizational structure, cryptographic capabilities of entities, roles of entities, or any of their associations as recited in and in the context of claim 1.

Rather, the cited portions of Ginter merely refer to adding, deleting or modifying completely dissimilar and unrelated items to the claimed items, such as software load modules, content control information, etc. Those are simply not entities within an organizational structure of one or more business organizations, such as, without limitation, employees in a corporation. Even if they were, the cited portions of Ginter fail to identify what roles are being maintained. Clearly, there is nothing about the disclosed "specification" or "control information" in Ginter that indicates it is a role, an entity in an organizational structure, a cryptographic capability or any of their associations.

Further, there is nothing in the cited portions of Ginter that any adding, deleting or modifying of software load modules, content control information, etc. in Ginter occurs upon any addition, deletion or modification of an entity, a cryptographic capability, or any of their associations. Rather, it appears such adding, deleting or modifying simply occurs at a user's instruction. See, e.g., paragraph 164 of Ginter.

Therefore, Applicant respectfully submits that the cited portions of Ginter fail to at least disclose each and every feature of claim 1. Claim 5 was previously cancelled and so its rejection is moot. Claims 2-4, 6-15, 64 and 65 depend from claim 1 and are therefore patentable subject matter at least for the reasons set forth above with respect to claim 1, and for the features they recite individually. Accordingly, for at least the above reasons, the rejection of claims 1-15, 64 and 65 under 35 U.S.C. §102 in view of Ginter is traversed and claims 1-4, 6-15, 64 and 65 are believed to be allowable.

Rejection under 35 U.S.C. §103(a)

The Office Action rejected claims 16-63 and 66-67 under 35 U.S.C. §103(a) as being obvious over Lampson et al., "Authentication in Distributed Systems: Theory and Practice", ACM Transactions on Computer Systems, Vol. 10, No. 4, Nov. 1992, pgs. 265-310 ("Lampson") in view of Ginter. Applicant respectfully traverses the rejection and does not accede to any particular interpretation of the claim.

Claim 16

Without acknowledging that the cited portions of Lampson disclose or render obvious the remainder of claim 16 (which Applicant submits the cited portions of Lampson do not), Applicant submits, and the Office Action admits, that the cited portions of Lampson at least fail to disclose or render obvious code to change the maintained electronic representations of said entities said characteristics and said relationships upon an addition, deletion, or modification of a characteristic or relationship of the entities as recited in claim 16.

Assuming *arguendo* that Ginter and Lampson are properly combinable (which Applicant does not concede), Applicant respectfully submits that the cited portions of Ginter fail to overcome the admitted deficiencies of Lampson. As discussed above with respect to claim 1, the cited portions of Ginter merely disclose being able to "add, delete, and/or otherwise modify the specification of load modules and methods, as well as add, delete or otherwise modify related information" such as control parameter data, information or

structures. Similarly, the cited portions of Ginter merely disclose “[h]andlers in a pathway of handling of content control information ... can establish, modify, and/or contribute to, permission, auditing, payment, and reporting control information related to controlling, analyzing, paying for, and/or reporting usage of, electronic content and/or appliances (for example, as related to usage of VDE controlled property content).”

However, none of the cited portions of Ginter discuss change of maintained electronic representations of entities within a business organization, or of characteristics of entities within a business organization, or of relationships of entities within a business organization, let alone to do so upon any addition, deletion or modification of a characteristic or relationship of entities within a business organization. Indeed, there is simply no reference in the cited portions of Ginter to entities of a business organization, characteristics of entities within a business organization, or relationships of entities within a business organization as recited in and in the context of claim 16.

The cited portions of Ginter merely refer to adding, deleting or modifying completely dissimilar and unrelated items to the claimed items, such as software load modules, control parameter data, information or structures, etc. Those are simply not entities within a business organization. Rather, they are merely computer software components and cannot reasonably be considered an entity within a business organization (such as an employee).

Even if the software load modules, control parameter data, information or structures, etc. of the cited portion of Ginter were entities within a business organization, the cited portions of Ginter would further fail to identify what characteristics and/or relationships those alleged entities have, let alone how Ginter discloses changing those characteristics and relationships. At most Ginter would merely disclose the entities and that they may be changed, but does not further identify the characteristics and relationships of those entities nor how they are changed.

Page 30 of the Office Action asserts that “[t]he advantage of Ginter et al. is then that it allows for electronic model to adapt with the changing needs and states of commercial applications and organizations. It would have been obvious to one of ordinary skill in the art at the time of invention to employ the updating and modification mechanism of Ginter and to use VDE as a whole in order to allow a model of an organization to adapt to businesses or organizations as they evolve and change.”

However, Applicant submits that it does not follow that the mere disclosure in Ginter that the VDE system is configurable and modular means that it disclose or teaches change of

maintained electronic representations of entities within a business organization, or of characteristics of entities within a business organization, or of relationships of entities within a business organization, let alone to do so upon any addition, deletion or modification of a characteristic or relationship of entities within a business organization. Ginter's configurability and modularity may, and is directed, to something entirely different such as the adding, deleting or modifying software load modules, control parameter data, information or structures, etc. Moreover, there is no indication any configuration or modularity action in Ginter occurs upon any addition, deletion or modification of a characteristic or relationship of entities within a business organization.

Accordingly, the cited portions of Ginter simply would not provide any relevant teaching or suggestion to modify Lampson in any way to arrive at the claimed invention of claim 16. Claims 17-51, 66 and 67 depend from claim 16 and are therefore patentable subject matter at least for the reasons set forth above with respect to claim 16, and for the features they individually recite.

Claim 52

Without acknowledging that the cited portions of Lampson disclose or render obvious the remainder of claim 52 (which Applicant submits the cited portions of Lampson do not), Applicant submits, and the Office Action admits, that the cited portions of Lampson at least fail to disclose or render obvious a maintenance system embodied in a tangible medium by which said database and said cryptographic authorities are maintained in coordination and by authorized parties assuring the representation of said organization and said cryptographic capabilities are soundly associated as defined by coordination directives; and maintenance transactions acting within said maintenance system, maintaining a view representing said organization as recited in claim 52.

Assuming *arguendo* that Ginter and Lampson are properly combinable (which Applicant does not concede), Applicant respectfully submits that the cited portions of Ginter fail to overcome the admitted deficiencies of Lampson.

For example, Applicant submits that the cited portions of Ginter do not disclose or teach a maintenance system by which the database, representing entities of a business organization and their characteristics, roles and relationships, and the cryptographic capabilities are maintained in coordination and by authorized parties assuring the representation of the organization and such that the cryptographic capabilities are soundly

associated as recited in claim 52. As discussed above, the cited portions of Ginter (namely, paragraphs 164, 204, 209 and 306) merely refer to adding, deleting or modifying completely dissimilar and unrelated items to the claimed items, such as software load modules, control parameter data, information or structures, etc. Those are simply not entities within a business organization or their characteristics, roles or relationships. Moreover, there is simply no disclosure in Ginter regarding maintaining in coordination a database as claimed with cryptographic capabilities as claimed.

Thus, none of the cited portions of Ginter would disclose or teach the claimed database, let alone a maintenance system to maintain coordination between the database and cryptographic capabilities (which is not even referenced in the cited portions). Indeed, there is simply no reference in the cited portions of Ginter to entities of a business organization, characteristics of entities within a business organization, or relationships of entities within a business organization as recited in and in the context of claim 52. Accordingly, the cited portions of Ginter simply would not provide any relevant teaching or suggestion to modify Lampson in any way to arrive at the claimed invention as they have little to nothing in common.

The Office Action further refers to column 8, lines 1-7 of Ginter as disclosing a database. However, a mere disclosure of a database does not disclose a database as claimed, let alone the coordination as claimed with cryptographic capabilities. The cited portion of Ginter is simply silent as to the function of the database or how it is used.

Further, the cited portions of Ginter do not disclose or teach maintenance transactions acting within said maintenance system, maintaining a view representing said organization as recited in claim 52. For example, the cited portions of Ginter do not disclose maintaining any sort of view representing a business organization. As noted, the cited portions of Ginter merely disclose a specific computer system for secure handling of information. Ginter is simply not directed to a business organization, let alone directed to entities within a business organization and the roles of entities within the business organization. Applicant submits that there is just no indication that the system of Ginter to modify software load modules, control parameter data, information or structures, etc. maintains a view of anything, let alone one representing a business organization.

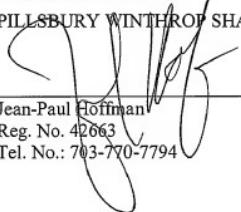
Claims 53, 54 and 56-63 depend from claim 52 and are therefore patentable subject matter at least for the reasons set forth above with respect to claim 52, and for the features they individually recite.

Thus, for at least the above reasons, the cited portions of Ginter and Lampson fail to disclose or render obvious each and all the features of claims 16-63, 66 and 67 and are thus allowable.

All rejections having been addressed, it is respectfully submitted that the present application is in condition for allowance. If questions relating to patentability remain, the examiner is invited to contact the undersigned to discuss them.

Should any fees be due, please charge them to our deposit account no. 03-3975, under our Order No. 061047/0265650. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced deposit account.

Respectfully submitted,
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